

# PowerSight®

PS2500 | PS3500  
Power Logger | Power Analyzer

*Smallest, Safest,  
Easiest to Use*

Everything you need for complete single and three-phase power and energy analysis



## PS2500 features

*Simple, foolproof data logging*

- ▲ the perfect instrument for basic power studies
- ▲ 4 current & 3 voltage channels
- ▲ optional harmonics

## PS3500 features

*Complete power/energy analyzer*

- ▲ great for handheld studies and long-term data logging
- ▲ control from keypad or PC
- ▲ view individual harmonics in display



**Bluetooth™**  
**SureStart™**  
**PowerSight Manager™**

Wireless communications  
Technology that eliminates connection errors  
PC software simplifies setup and built-in Report Writer produces complete, concise reports  
For safe connections to 600 VAC service  
Store more data on removable memory cards



**CAT IV Rated**  
**SD Card Slot**

# PS2500 Power Logger

# PS3500 Power Analyzer

## Two Powerful Choices

The PS2500 and PS3500 are inexpensive yet versatile, handheld power monitors. Both provide a complete solution for the process of performing power studies - from setup, to data gathering, to issuing a comprehensive final report. Both are excellent choices for power studies; the PS3500 offers more measurements and features that are accessible through the keypad. Note their contoured, rubberized grip that fits securely and comfortably in the hand. They are lightweight (only 1.1 lb.), compact and rugged, — ideal for field work!

## AC & DC Power Measurements

Both are equipped with 4 current and 3 voltage channels to measure voltage, current, and power on all phases as well as neutral currents for single-phase, two-phase, three-phase, split-delta, 2PT/2CT, DC, 45-66 Hz, and 360-440 Hz applications.

## Comprehensive Logging Capabilities

Both allow for logging of voltage and current, power usage and energy consumption in kWh. They have ample internal memory for monitoring up to months at a time. These units measure, record, and log: V, I, W, VA, VAR, PF, Hz, THD, — all simultaneously. You can audit individual loads or entire facilities, measure and profile circuit capacity, check load panel imbalance, track harmonic distortion and more.

## SD Memory Card Slot

With inexpensive Secure Digital memory cards logging times can be extended and multiple surveys can be saved. SD cards offer an alternative download method to a PC. Whenever an SD card is inserted data is always saved automatically to the card. A card can be swapped after pausing and then monitoring resumed. Cards can be taken to a PC thus avoiding the need to take a PC to the meter in the field.

## Bluetooth Communications

Each unit communicates wirelessly to a PC via Bluetooth so there's no need to connect a cable and be "tethered" to a PC! On a nearby PC screen a few feet away, real-time waveforms, phasors and harmonic spectra can be displayed. Also, from a few feet away, you can remotely control a PowerSight monitor *wirelessly*.

## PC Software & Report Generator

All PowerSight monitors include PowerSight Manager PC software for data analysis. This software can display individual graphical logs, zoom and expand for detail, print, and export data to a spreadsheet file. The automatic Report Writer compiles the survey data into tables and graphs in just seconds to eliminate tedious manual cutting and pasting. The report is editable so you can insert your conclusions and recommendations. The comparison mode is ideal for comparing surveys such as "before and after" adding new loads or making circuit changes, or verifying the financial savings after implementing energy savings measures.

## Safety First!

Both are **CAT IV** rated, the most stringent safety rating for handheld test equipment. Thus, the PS2500 and PS3500 are deemed safe for connection to up to 600 V service anywhere in a facility.

## No More Connection Errors or Wasted Surveys

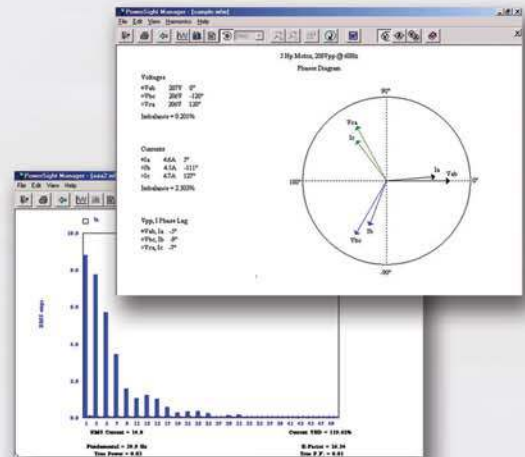
Our patented, built-in SureStart™ intelligence checks your voltage and current connections and advises you before you begin monitoring.

## Going Green?

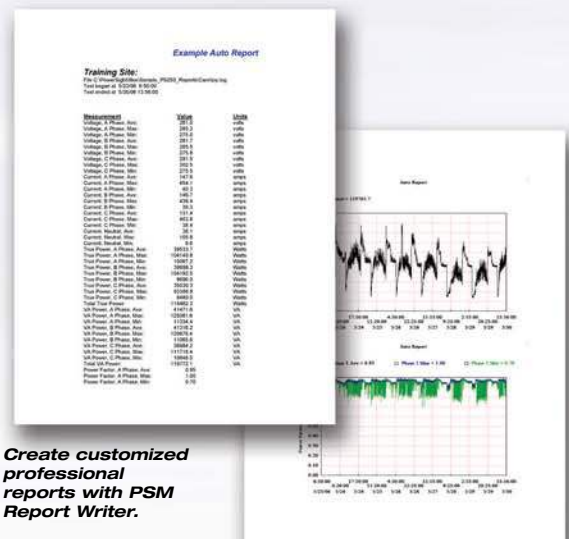
First start with a PowerSight monitor to identify energy savings opportunities. Find out how much energy you are using — and when. Implement a solution and monitor again to verify. Get the results the way you want, in watts or in dollars.

## Going Solar or Wind-Powered?

PowerSight meters are smart and tell you when you are consuming power and when you are generating and sending power back to the grid.



Display waveforms, phasors, and harmonic spectra on your PC.



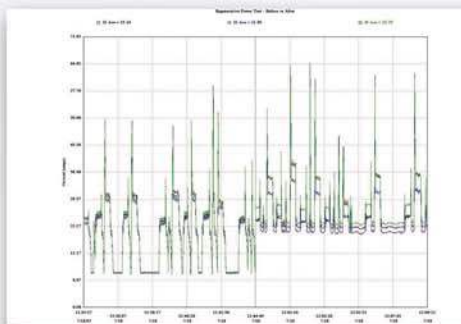
Create customized professional reports with PSM Report Writer.

# Power Quality Analyzers

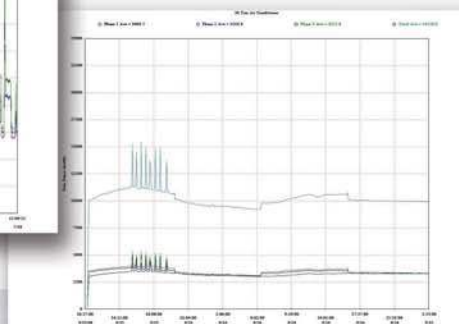
## ...Smallest, Safest, Easiest to Use!

### Comparison Chart

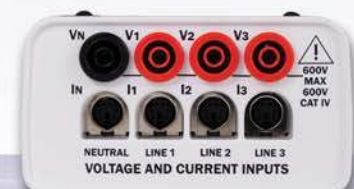
	PS2500	PS3500	Recommendation
<b>Keypad</b>	Two keys. <b>On/Off</b> key and <b>Next</b> key. Each press of <b>Next</b> scrolls through a list of real-time meter values, similar to a multimeter. <b>Next</b> also controls Start/Stop of monitoring.	25-button keypad with individually labeled keys for immediate viewing of real-time values like a multimeter without scrolling. The keypad can program setup and control Start/Stop of monitoring.	Choose the PS3500 if you often perform spot checks or make handheld multi-meter measurements and prefer using a labeled keypad instead of scrolling through a list.
<b>Display Functions</b>	Certain functions are only available on the PC, including: THD, individual harmonic content, VAR, KWh, cost, frequency, duty cycle, displacement power factor, phase lag angle, peak demand power, and peak demand period. The PS2500 display is not backlit.	More functions are available directly on the meter display, including: min/max/average summaries, THD, individual harmonic content, VAR, kWh, cost, frequency, duty cycle, displacement power factor, phase lag angle, peak demand power, and peak demand period. The PS3500 display is backlit.	Choose the PS3500 to get additional measurement functions on the meter display or to immediately view a summary of results after monitoring instead of having to download to a PC. The backlit display of the PS3500 is better for low light conditions.
<b>PC Setup</b>	Setup is via the PC only and saved to the meter. Meter can be turned off and taken to the field. Monitoring Start/Stop can be controlled on meter or by a PC. Changing the setup for the PS2500 requires a PC.	Either the PC or the keypad can be used to program the meter. Setup and Start/Stop of monitoring can be performed in the field with or without a PC.	PS2500 setup is done only via a PC. Choose the PS3500 if programming the setup with or without a PC offers you more flexibility. You can change setup anytime from the PS3500 keypad; no PC is needed on site.
<b>Demand Power KWh, and Cost Summary</b>	Generated in the PSM software and can be viewed only on a PC.	Available in the meter display from the keypad or can be viewed in the PSM software on a PC.	Both perform logging. Choose the PS3500 if you prefer using the meter's keypad buttons to view a summary of energy measurements in the display without having to download to a PC.
<b>Duty Cycle (% On/Off)</b>	Not available	Available	Choose the PS3500 for duty cycle measurements.
<b>Transient Disturbances</b>	Not available	Available on one channel. Transient count, worst magnitude and duration.	Choose the PS3500 for logging of transient disturbances.
<b>Harmonics</b>	Optional. Displayed on PC only in PSM software.	Included. Displayed on meter or on PC	Both log THD. The PS3500 is better suited to handheld measurements.
<b>Cost</b>	Lowest	Low	Both are good value. Choose which features are important to you.
<b>Role or mode of application</b>	Better suited as an economical, easy-to-use power logger; logging is its main role. Best suited for applications needing a logger that is brought back to a PC for analysis and reports. Has fewer handheld operation and meter display functions.	Very good for logging and better for spot checks and handheld measurements like a multimeter. More display functions are available in PS3500.	Choose the PS2500 for an economical data-logger. Choose the PS3500 if, in addition to logging, you often need to perform spot checks or handheld measurements like a multimeter and prefer using the meter's keypad instead of scrolling through a list.



**View plots and summaries in PSM software on a PC. Use zoom, expand, annotate and export data functions.**



**Voltage and current connections for both single and three-phase measurements.**



# PS2500 | PS3500

Power Logger | Power Analyzer

## Specifications

**Size:** 3.88" (9.86 cm) W x 7.72" (19.61 cm) L x 1.58" (4.01 cm) D;  
In handheld region: 2.14" (5.44 cm) deep at top end

**Weight:** 1.1 lb. (0.5 kg)

**Operating Range:** 32 - 122 degrees F (0 - 50 degrees C)  
Relative humidity to 70% (non-condensing)

**Power Requirement:** 12 VDC @ 500 mA, wall-mount power supply included (specify 120 V or 240 V). Internal Ni-Cad battery operates 8-10 hours after full charge.

**Measurement Rate:** Analyzes two cycles per second of each voltage and current input at 16  $\mu$ s; uses 130 samples per cycle @ 60 Hz. All measurements updated once per second

**Voltage Measurement Ranges:**  
1-600 Vrms steady-state (direct input); 1- 600 Vdc  
or 600-5,000 Vrms with 5 KVP probes,  
or 600-15,000 Vrms with 15 KVP probes.

Display Range: 1-6 MV (using input ratios)  
Meter Display Resolution: 1V (PS2500); 0.1V (PS3500)  
Accuracy: 0.5% of reading  $\pm$ 0.3 Vrms

### Current Measurement Ranges:

With HA5: 0.02 - 5 A  
With HA100: 0.1 - 100 A  
With HA1000: 1 - 1000 A  
With FX3000: 10 - 3000 A  
With FX5000: 100 - 5000 A  
With DC600: 5 - 600 A DC

Display Range: 1 mA - 6 MA (using input ratios)  
Meter Display Resolution: 1A (PS2500); 0.1A (PS3500)  
Accuracy: 0.5% of reading plus accuracy of probe  
Phasor diagram: via PC  
Imbalance: via PC

### Frequency Measurement:

Range: DC, 45 - 66 Hz, 360 - 440 Hz fundamental  
Display on meter: (PS3500 ONLY)  
Accuracy:  $\pm$ 0.5%

**Harmonics Measurement:** 45 - 3000 Hz (50th harmonic @ 50/60 Hz,  
7th @ 400 Hz); (HAO option needed with the PS2500)

**THD Accuracy:** 1%; Displays THD and individual harmonics through 25th harmonic of all signals on PS3500 only. PowerSight Manager software displays harmonics through 50th harmonic for both units on a PC; (HAO option needed with the PS2500)

### Power, Energy, Cost, Power Factor:

VA, VAR, True Power Factor (TPF), Displacement Power Factor (DPF), Phase Lag Angle, Energy kWh, Energy cost in \$, Waveform snapshot

Display Range: 1 watt - 60 MW (using input ratios)

Accuracy: 1% plus accuracy of current probe

Transient Detection: one channel (PS3500 ONLY)

### Logging Period (resolution)

User selectable from 1 second - 99 minutes

### Logging Duration (length of monitoring session)

User selectable up to 2 years according to memory allocation

### Other Features:

Crest Factor, K Factor, Peak Demand Period, Peak Demand of Peak Demand Period.

Duty cycle, On/Off cycle %, avg On time, avg Off time (PS3500 ONLY)

SureStart™ checks connections for error free monitoring

Backlit Display (PS3500 ONLY)

Wireless communications: Bluetooth

SD memory card slot to 2GB

CE 600V Cat IV

Keypad control of functions (PS2500: 2 keys; PS3500: 25 keys)

Programming and set-up with PC (required for PS2500)

Setup of operating parameters in the field without PC (PS3500 ONLY)

Review of max/min/avg of measurements in meter display (PS3500 ONLY)

Spanish language user interface (PS3500 ONLY)

Regenerative power measurement mode (alternating consume/generate)

Two CT power measurement mode, open delta measurement mode

wye, 3-wire delta, 4-wire delta measurement modes

Data Exportable to Excel

Compatible with SafeConnect™ accessory

Report Writer Software, summary or comparison, w or w/o graphs, text editable

Long-term monitoring via external 12 V battery

Derive operating power off power being monitored with LDC accessory

**Non-intrusive monitoring of appliances:** with 120ADP accessory

**Internal Data Retention:** 8 years



**HA5** 0.02 A to 5 A AC  
**HA100** 0.1 A to 100 A AC  
Accuracy: 2%,  
Size: 5.25" x 2.1" x 1.35" for  
conductors up to 0.8" diameter



**HA1000**  
1 A to 1000 A AC  
Accuracy: 0.5%,  
Size 9" x 4.4" x 1.75" for  
conductors up to 2.13" diameter



**DC600**  
5 A to 600 A DC;  
5 A to 400 A, DC/AC  
Accuracy  $\pm$ 1A  $\pm$ 2%, 5A to 400A;  
 $\pm$ 1A  $\pm$ 3%, 400 A to 600 A DC  
Size: 7.68" x 2.6" x 1.34" for  
conductors up to 1.18" diameter



**FX3000**  
10 A to 3000 A AC  
**FX5000** 100 A to 5000 A AC  
Both models: Accuracy 2%,  
Size 24" long for conductors  
up to 7.5" diameter



### Complete, pre-packaged systems

Systems are equipped with your choice of clamp-on or flexible current probes, voltage leads, plug-in charger unit, PC software and instruction manual.

**Other options available:** 5 KV and 15 KV medium voltage probes; soft carry case; weatherproof operating case; line-to-DC converter.

# PowerSight®

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